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## **Government Rights**

This invention was made with government support under Contract No. F30602-93-C-0160 awarded by the United States Air Force. The government has certain rights in the invention.

## In the Claims:

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(Amended) A system for querying heterogeneous data sources distributed over a network, said system comprising:

a request translator for translating a request having an associated semantic data context into a query having at least a second semantic data context associated with at least one of the heterogeneous data sources; and

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a data translator which translates received data from the semantic data contexts associated with the heterogeneous data sources into the semantic data

context associated with the request.

- (Amended) The system of claim 4 wherein said request translator detects a 6.
- difference between the semantic context of data requested by the request and the 2
- semantic context of data supplied by the data source and converts the semantic data 3
- context of the request into the semantic data context of the data source. 4
- (Amended) The system of claim 1 wherein said data translator translates 13. 1
- received data into the semantic data context of the request using a pre-defined 2
- 3 function, a look-up table, or a database query.

(Amended) A method for duerying heterogeneous data sources over a network, said method comprising/the steps of:

(a) translating a fequest having an associated semantic data context into a query having at least a second semantic data context associated with at least

one of the heterogeneous data sources to be queried; and



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By

(b) translating received data from the <u>semantic</u> data contexts associated with the heterogeneous data sources into the <u>semantic</u> data context associated with the request.

19. (Amended) The method of claim 17 further comprising the steps of:

2 detecting a difference between the <u>semantic</u> context of data requested

by the request and the semantic context of data supplied by the data source to be

4 queried; and

5 converting the <u>semantic</u> data context of the request into the <u>semantic</u>

6 data context of the data source.

1 20. (Amended) The method of claim 19 wherein the semantic data context of the

2 request is converted into the semantic data context of the data source using a pre-

defined function, a look-up table, or a database query.

1 25. (Amended) The method of claim 14 wherein step (b) further comprises

2 translating received data into the semantic data context of the request using a pre-

defined function, a look-up table, or a database query.

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26. (Amended) An article of manufacture having computer-readable program means for querying heterogeneous data sources over a network embodied thereon, the article comprising:

computer-readable program means for translating a request having an associated semantic data context into a query having at least a second semantic data context associated with at least one of the heterogeneous data sources to

7 be queried; and

computer-readable program means for translating received data from the semantic data contexts associated with the heterogeneous data sources into the semantic data context associated with the request.

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(Amended) The article of manufacture of claim 29 further 31. 1 comprising: 2 computer-readable program means for detecting a 3 difference between the semantic context of data requested by the request 4 and the semantic context of data supplied by the data source; and 5 computer-readable program means for converting the 6 semantic data context of the request into the semantic data context of the 7 8 data source. (Amended) The article of manufacture of claim 31 wherein said 32. 1 computer-readable program means for converting the semantic data 2 context of the request into the semantic data context of the data source 3 comprises a pre-defined function, a look-up table, or a database query. 4 (Amended) The article of manufacture of claim 26 wherein said 38. 1 computer\_readable program means for translating received data into the 2 semantic data context of the request comprises a pre-defined function, a 3 look-up table, or a database query. 4

## REMARKS

Claims 1-38 were presented for examination. Claims 1-38 were rejected under 35 U.S.C. 103(a) and remain pending in the case. Applicant hereby amends claims 1, 6, 13, 14, 19, 20, 25, 26, 31, 32, and 38 to more clearly recite the claimed invention. Before addressing the claim rejections, a brief review of the invention recited by the amended claims may prove helpful.

Independent claim 1 recites a system for querying heterogeneous data sources distributed over a network comprising a request translator and a data translator. The request translator translates a request having an associated semantic data context into a query having

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